scarcely emarginate. Caudal peduncle as long as deep. Scales extremely small, smooth; lat. l. 120–125. Yellowish brown above, with transverse dark brown spots or interrupted cross-bands; head dark olive-brown above; lower parts whitish; dorsal and caudal greyish, the latter blackish at the base; pectorals greyish olive above, white beneath; ventrals and anal white; a black spot at base of ventral.

Total length 93 millim.

Specimens were collected by Dr. R. Hanitsch, of the Raffles Museum, Singapore, on Mount Kina Balu, in the Kadamaian River, at an altitude of 2100 feet.

A female contains ripe ova of large size, 2 millim. in diameter.

XXII.—*On the Occurrence of* Gobius capito *on the Coast of Brittany*. By G. A. Boulenger, F.R.S.

Last year in the Bay of Concarneau, and this year in the Gulf of St. Malo, my attention was attracted to a large Goby, growing to 10 inches, and most excellent eating, which appears to have been overlooked by all authors who have written on the fishes of the English Channel and the Bay of Biscay. This Goby I have ascertained to be *Gobius capito*, C. & V., a species believed to be restricted to the Mediterranean. The description given by most recent authors of the Gobies of the English Channel are so unsatisfactory, and denote so imperfect a knowledge on the part of the authors who have dealt with them, that it is highly probable the species will soon be added to the British fauna, as specimens may have been confounded with *G. paganellus* and *G. niger*, which latter species is stated by Day to attain to at least 9½ inches in length, although I strongly doubt its ever reaching much more than half that length. Mr. E. J. Allen kindly informs me that the largest Goby preserved in the Plymouth Laboratory is a *G. niger* 5 inches long.

In order to assist in the identification of this fish and to justify the correctness of my determination, I append the principal characters of a specimen obtained in August in rock-pools at St. Cast, Gulf of St. Malo.

Habit particularly stout and heavy; depth of body 5 times in total length, length of head 3⅔ times. Head a little broader than deep; snout 1½ diameter of eye, which is 5½ times in length of head and a little exceeds interorbital width; strongly enlarged outer teeth in the jaws; maxillary extending to below posterior third of eye; head scaly only on the

occipital and upper opercular regions. The distance between the eye and the dorsal equals the distance between the end of the snout and the preopercle. Dorsal VI, 15, the two portions very narrowly separated; the longest soft rays ½ length of head, a little longer than the rays of the first fin, the base of which measures ½ its distance from end of snout. Anal with 12 rays. Pectoral ¾ length of head, with silk-like upper rays. Ventral not reaching vent, with well-developed anterior flap forming an obtusely pointed process on each side. Caudal rounded. Caudal peduncle as long as deep. 61 scales in a longitudinal series, 22 between dorsal and anal. Greenish to blackish olive, more or less spotted and marbled with black; dorsal and caudal fins spotted with black; ventral whitish; yellowish white beneath.

Total length 19 centimetres.

Of the two British species with which this *Gobius* may have been confounded, *G. paganellus* and *G. niger* differ in the larger scales, there not being more than 17 between the dorsal and the anterior rays of the anal and 55 in a lateral series, and in the absence of the antero-lateral lobe of the ventral disk. Günther's statement (Cat. Fish. iii. p. 55) that the interorbital space is scaly in *G. capito* is erroneous; a specimen with 17 longitudinal series of scales between the dorsal and anal fins, put down by the same author as *G. capito* (spec. *b*), has only 55 scales in the lateral line, and is, in fact, a *G. paganellus*. Fine large specimens from the Bosphorus, received from Dr. Dickson since the publication of the British Museum Catalogue, have been carefully compared with the specimen described above, which affords the first evidence of the presence of *G. capito* in the English Channel.

XXIII.—*On the Classification of Ciliate Infusoria.*

By Dr. V. Sterki *.

After so eminent a naturalist as Bütschli has modified Stein's system of Ciliata, it may appear rather assuming if I venture to propose some changes. It is done because my views have long been held, and have been confirmed as the years passed.

In the first place, it seems that the Peritricha are of an organization quite different from that of all other ciliates. The formation of the anterior part, peristome, mouth, &c., is

* From 'The American Naturalist,' vol. xxxii. no. 378, pp. 425–428.